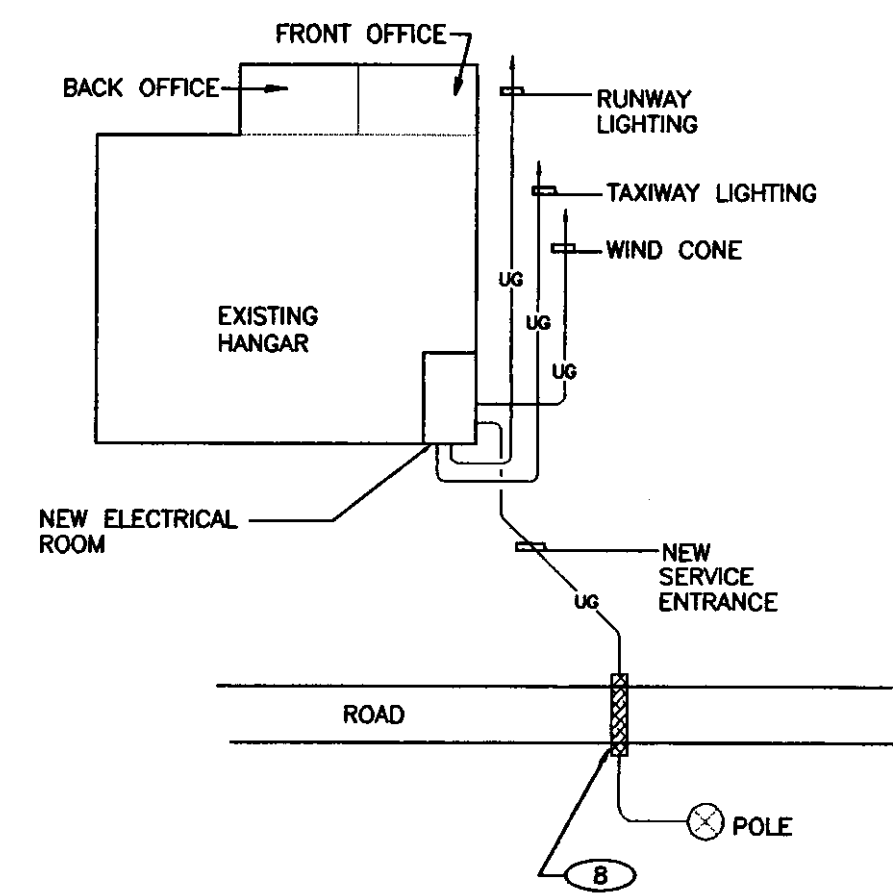


### ONE LINE DIAGRAM

NOT TO SCALE

- NOTES:  
1. ALL CONDUCTORS ARE CU 600V INSULATED EXCEPT BONDING AND GROUND CONDUCTORS MAY BE BARE.



### ELECTRICAL SITE PLAN

NOT TO SCALE

### ELECTRICAL LEGEND

- Ⓚ ALARM BELL - TEL=TELEPHONE, SEW=SEWAGE PUMP STATION
- Ⓛ CONTACTOR, MH=6"-0" TO TOP
- ⓁⓂ AUTO-TRANSFORMER, MH=6"-0" TO TOP
- Ⓛ SINGLE POLE SWITCH W/ PILOT, LEVITON #5336-1 OR EQUIVALENT, MH=4"-0"
- Ⓛ DUPLEX RECEPTACLE (20A, 125 VOLTS), LEVITON #5896-1 OR EQUIVALENT, MH=3"-0" TO TOP
- Ⓛ LAMPHOLDER, LEVITON KEYLESS #9875 OR EQUIVALENT
- Ⓛ PHOTO CELL
- Ⓛ CONTROL PANEL INDICATOR LIGHT
- Ⓛ UNDERGROUND WIRING
- 200A-2P CIRCUIT BREAKER, TRIP AMPS AND POLES INDICATED
- Ⓛ FUSED SWITCH, FUSE AMPS/FRAME SIZE INDICATED
- Ⓛ EXISTING PANELBOARD, 120/240V, 1PH, 3W.

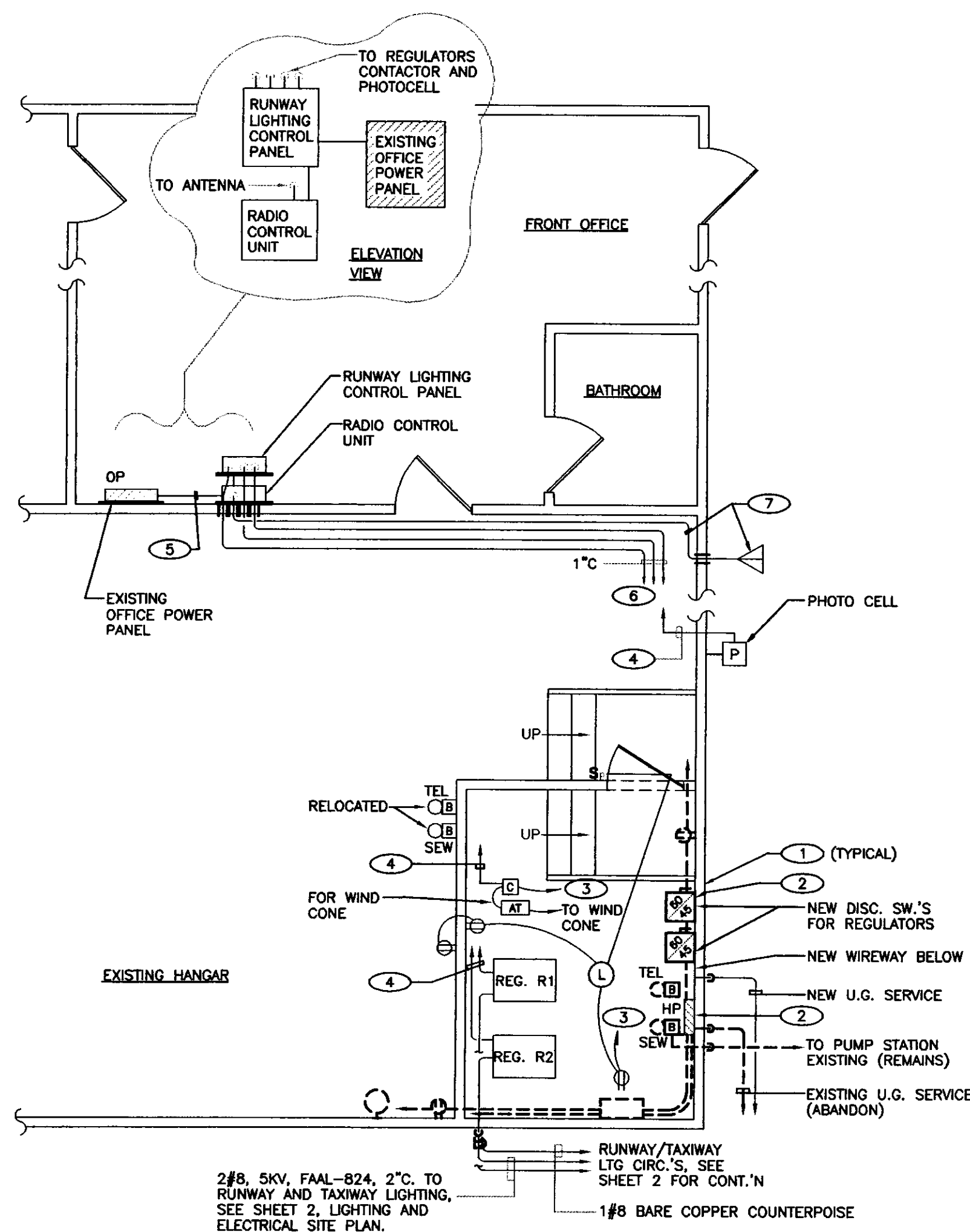
NOTE:  
ANY SYMBOL DRAWN DASHED INDICATES EXISTING EQUIPMENT.

### GENERAL NOTES

1. WALL MOUNT CONTROL PANEL (L-821). FIELD VERIFY LOCATION WITH AIRPORT MANAGER PRIOR TO ROUGH-IN.
2. RADIO CONTROL UNIT (L-854). FIELD VERIFY LOCATION WITH AIRPORT MANAGER PRIOR TO ROUGH-IN.
3. COORDINATE WITH ELECTRIC UTILITY FOR NEW METERING REQUIREMENTS AND SERVICE ENTRANCE HOOK-UP.
4. ALL CONDUIT SHALL BE SCHEDULE 40 PVC, UNLESS OTHERWISE NOTED.
5. RADIO CONTROL UNIT (L-854), CUMULATIVE MODE OF PULSES -3, -5, AND -7 FOR CONTROLLING RUNWAY LIGHT BRIGHTNESS: 10, 30, 100 RESPECTIVELY. ONLY ONE BRIGHTNESS OUTPUT SHALL BE ENERGIZED AT ONE TIME.
6. RELOCATE THE TELEPHONE BELL AND THE SEWER ALARM, ON EXISTING HANGER PANEL BACKBOARD, TO NEW LOCATION AS INDICATED. VERIFY EXACT LOCATION WITH AIRPORT MANAGER.
7. SECURELY MOUNT THE RADIO CONTROL UNIT AND THE RUNWAY LIGHTING CONTROL PANEL TO THE WALL, IF NECESSARY USE A 3/4" P.T. PLYWOOD BACKBOARD, PAINTED GRAY.
8. ELECTRICAL CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING HIS BID TO VERIFY ALL EXISTING CONDITIONS AFFECTING HIS WORK.
9. ALL INSTALLATIONS AND REMOVALS SHALL BE ACCOMPLISHED IN A NEAT AND WORKMAN LIKE MANNER.
10. INSTALL EQUIPMENT AND DEVICES PER MANUFACTURERS REQUIREMENTS AND COMPLY WITH THE 1993 NEC.
11. ELECTRICAL CONTRACTOR SHALL TEST ALL EQUIPMENT AND DEVICES HE INSTALLS FOR PROPER OPERATION. HE SHALL SUBMIT A NOTORIZED LETTER TO THE ENGINEER AND OWNER CONFIRMING PROPER OPERATION OF EQUIPMENT AND DEVICES.
12. LOCATE L-828 CONSTANT CURRENT REGULATORS A MINIMUM OF 6" FROM THE WALL.
13. MAINTAIN EXISTING SERVICE TO PANEL BOARD HP UNTIL NEW SERVICE IS COMPLETE AND ENERGIZED. COORDINATE SERVICE INTERRUPTION WITH AIRPORT MANAGER AT LEAST 1 WEEK PRIOR TO CHANGE OVER.

### KEYED NOTES

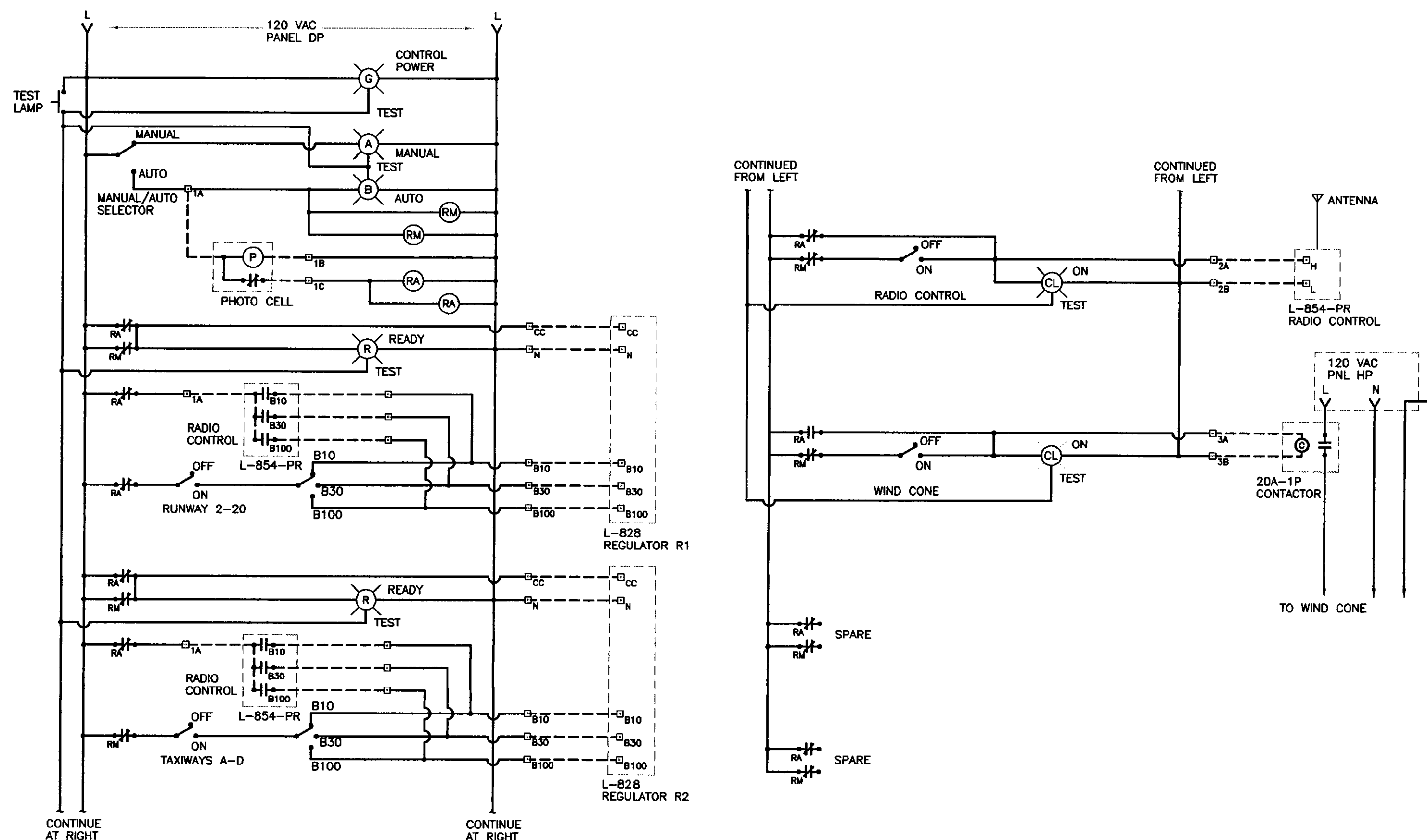
1. ELECTRICAL EQUIPMENT SHALL BE SECURELY MOUNTED ON 3/4" P.T. PLYWOOD BACKBOARD, PAINTED RED.
2. EXISTING 200A PANEL BOARD IN HANGAR (HP), REFEED FROM NEW SERVICE ENTRANCE AS INDICATED.
3. INSTALL NEW 120V, CIRCUIT (2-#12, 1-#12G, 1/2°C). CONNECT TO UNUSED 20A-1P CIRCUIT BREAKER IN HANGER PANEL OR PROVIDE NEW CIRCUIT BREAKER TO MATCH EXISTING AS REQUIRED.
4. TO CONTROL PANEL IN FRONT OFFICE.
5. FEED THE RUNWAY LIGHTING CONTROL PANEL, RADIO CONTROL UNIT, AND AUXILIARY RELAY CONTROL CABINET FROM THE OFFICE POWER PANEL WITH (2-#12, 1-#12G, 1/2°C). PROVIDE NEW 20AMP-1P CIRCUIT BREAKER TO MATCH EXISTING PANEL.
6. CONTROL WIRING TO THE 7 1/2 KW CONSTANT CURRENT REGULATORS, CONTACTOR PHOTO CELL, ETC.
7. REMOTE ANTENNA SHALL BE MOUNTED ON THE OUTSIDE OF THE HANGAR (AS INDICATED) IN A MANNER NOT TO INTERFERE WITH EXISTING STRUCTURES AND DEVICES SUCH THAT ANTENNA LEAD-IN CABLE (SUPPLIED AS PART OF THE RADIO CONTROL UNIT) DOES NOT EXCEED 50FT. FIELD VERIFY LOCATION WITH AIRPORT MANAGER.
8. INSTALL SCHEDULE 80 4" CONDUIT, ENCASED IN CONCRETE, BELOW ROAD, SEE DETAIL SHEET.



### ELECTRICAL ROOM FLOOR PLAN

NOT TO SCALE

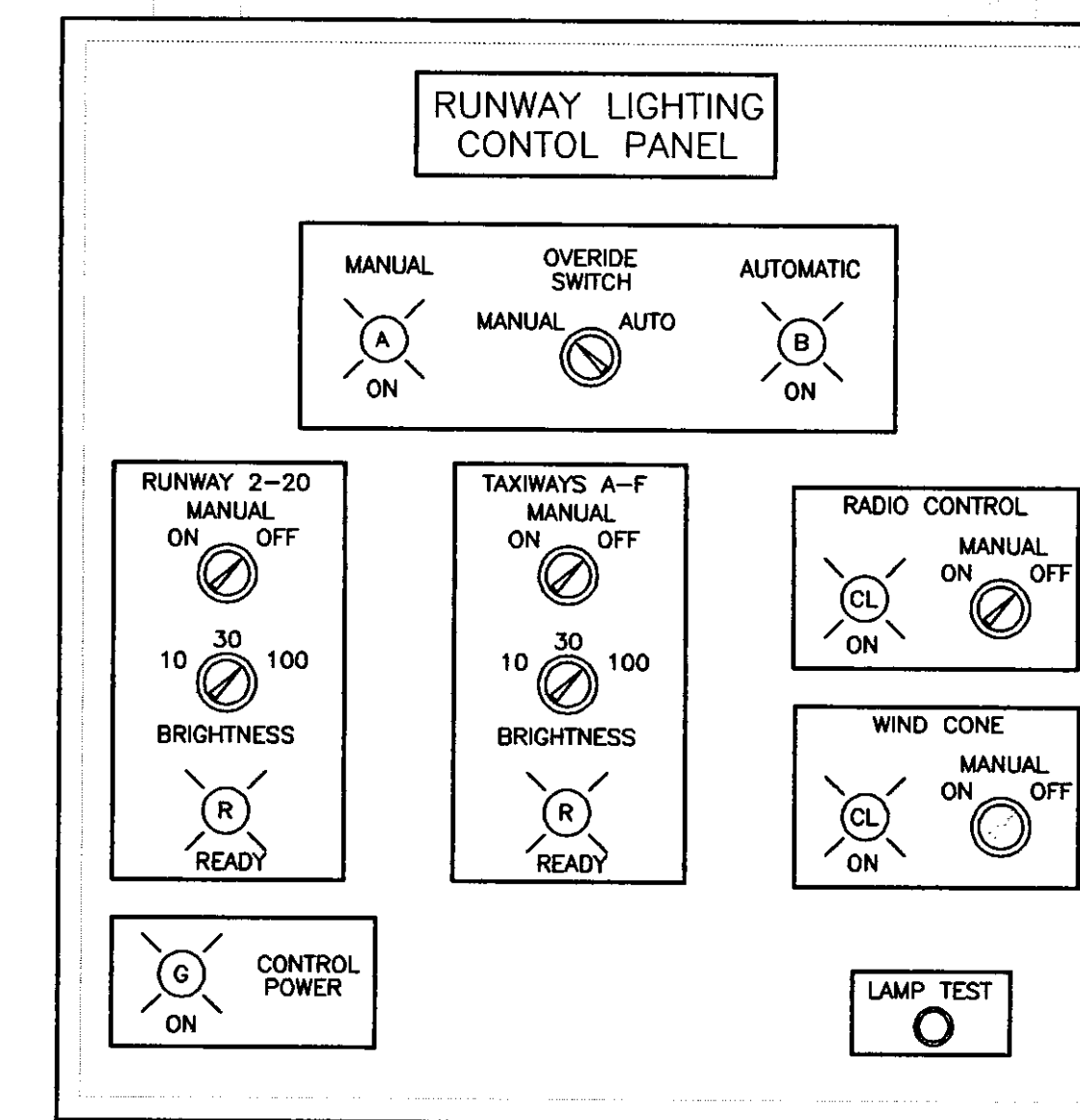
- NOTES:  
1. ALL WIRING IN ELECTRIC ROOM AND HANGER SHALL BE INSTALLED IN METAL RACEWAYS IN ACCORDANCE WITH NEC-513.



### RUNWAY LIGHTING CONTROL ONE-LINE DIAGRAM

NOT TO SCALE

- NOTES:  
1. BONDING CONDUCTORS ARE NOT SHOWN.  
2. ALL DEVICES ARE LOCATED IN L-821 CONTROL PANEL EXCEPT REMOTE DEVICES DESIGNATED BY [ ]  
3. FIELD WIRING DESIGNATED BY - - - - -  
4. RELAYS RA AND RM ARE 4PDT EACH UNUSED SIDE OF FORM C CONTACTS ARE NOT SHOWN.  
5. L-854 RADIO CONTROL PANEL SHALL HAVE 2 SPST OUTPUT CONTACTS FOR EACH BRIGHTNESS LEVEL. AT CONTRACTORS OPTION PROVIDE SPST OUTPUT CONTACTS IN L-854 RADIO CONTROL PANEL AND 3 DPST RELAYS IN L-821 CONTROL PANEL.



### RUNWAY LIGHTING CONTROL PANEL ELEVATION

- NOTES:  
1. PILOT LIGHTS, WITH DOMED PLASTIC COVER (COLORS: A=AMBER, B=BLUE, CL=CLEAR, G=GREEN, R=RED).  
2. ALL EQUIPMENT SHALL BE FAA APPROVED FOR USE IN L-821 PANELS FOR REMOTE CONTROL OF AIRPORT LIGHTING AND L-841 AUXILIARY RELAY CABINETS FOR PILOT CONTROL OF AIRPORT LIGHTING CIRCUITS. REFER TO FAA ADVISORY CIRCULARS 150/5345-13A AND 150/5345-3D.  
3. PANEL ENCLOSURES SHALL BE HOFFMAN (OR EQUAL), NEMA TYPE 12, WITH HINGED COVER AND METAL BACK PAN FOR MOUNTING EQUIPMENT. EACH ENCLOSURE SHALL BE CONSTRUCTED OF CODE GAUGE STEEL WITH ANSI #61 GREY BAKED ENAMEL FINISH OVER RUST INHIBITING TREATMENT.  
4. PROVIDE SPARE PARTS AND TOOL CONSISTING OF 6 SPARE LAMPS, 2 SPARE RELAYS, LAMP REMOVAL TOOL AND WRENCH FOR SWITCH/PUSHBUTTON/PILOT LIGHT/LOCKING RINGS.  
5. PROVIDE ENGRAVED LABELS FOR ALL CONTROL SWITCHES AND PILOT LIGHTS AS SHOWN.

NO.	DATE	REVISIONS	BY	CK'D

**DuBois & King**  
INC.  
engineering planning management development

STATE OF VERMONT  
AGENCY OF TRANSPORTATION  
CALEDONIA COUNTY STATE AIRPORT  
ELECTRICAL PLANS AND DETAILS

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SHEET 3 OF 13	